

LINEAR BEARING ASSEMBLY PROCEDURES:

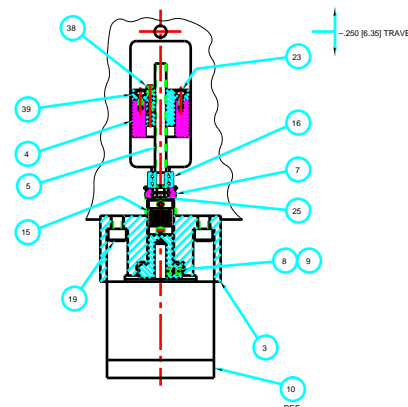
1. PRIOR TO ASSEMBLY, ALL MACHINED PARTS MUST BE FREE OF GREASE, OIL, DUST, LINT AND ALL FOREIGN MATTER. SPECIAL ATTENTION SHOULD BE PAID TO THE BEARING SURFACES.
2. PRIOR TO FITTING, ALL LINEAR BEARINGS MUST BE WASHED WITH A CLEANING AGENT THEN OILED LIGHTLY UNLESS REMOVED FROM ORIGINAL PACKAGE.
3. FIT BEARING RAILS onto THEIR BASE AND SECURE LIGHTLY WITH SCREWS.
4. INSERT ROLLER CAGES AND CENTER ALONG BEARING RAILS.
5. ADJUST BEARING PRELOAD BAR USING SET SCREWS 21 UNTIL PLAY FREE. THE PRELOAD EACH SET SCREW TO APPROX. 19 - 38 lb. TIGHTEN TO APPROX. 5-10 in. INSURE THAT SMOOTH ROLLING MOTION IS OBTAINED.
6. SECURE SCREWS ON BEARING RAILS TIGHTLY USING A TORQUE WRENCH.

TECHNICAL SPECIFICATIONS:

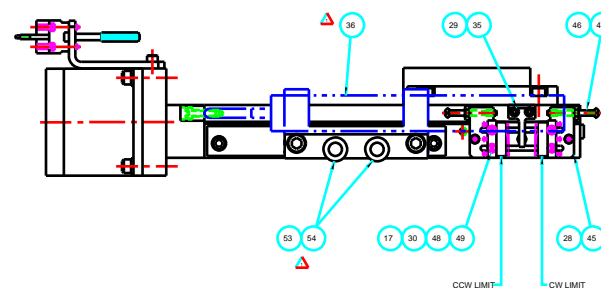
LOAD CAPACITY: 200 lbs. [90kg]
TRAVEL RANGE: -25 [6.35mm]
STRAIGHTNESS OF TRAJECTORY: 1×10^{-5} rad/5mm
RESOLUTION: 2.5 μ m
REPEATABILITY: 5 μ m

1. FIT DRIVE SCREW AND PROCEDURE: SCREW INTO BALL SCREW NUT MOUNT AND SECURE LIGHTLY WITH SCREWS.
2. INSTALL DRIVE SCREW INTO UPPER CARRIAGE AS SHOWN IN SECTION B-8. DEFER INSTALLATION OF ITEMS 3, 10, 15 UNTIL LATER.
3. SECURE BALL SCREW NUT MOUNT TO BASE CARRIAGE LIGHTLY WITH SCREWS.
4. HOLDING THE BASE CARRIAGE STATIONARY, MOVE THE UPPER CARRIAGE SLOWLY BACK AND FORTH A FEW TIMES.
5. POSITION UPPER CARRIAGE SO THAT IT IS FLUSHED WITH LOWER CARRIAGE AND TIGHTEN BALL SCREW NUT TO BASE CARRIAGE WITH A TORQUE WRENCH.
6. REPEAT STEP 4. TIGHTEN DRIVE SCREW TO BALL SCREW NUT MOUNT.
7. WITH UPPER CARRIAGE AND LOWER CARRIAGE IN FLUSHED POSITION, INSTALL ITEMS 3, 10, AND 5.
8. NOTE ITEM 38 (NUT) BACKLASH FROM SCREW IS REMOVED.

NOTE: ITEM 38 (NUT) WILL ROTATE SMOOTHLY THROUGH FULL RANGE OF MOTION. LUBRICATE WITH LIGHT MACHINE OIL.



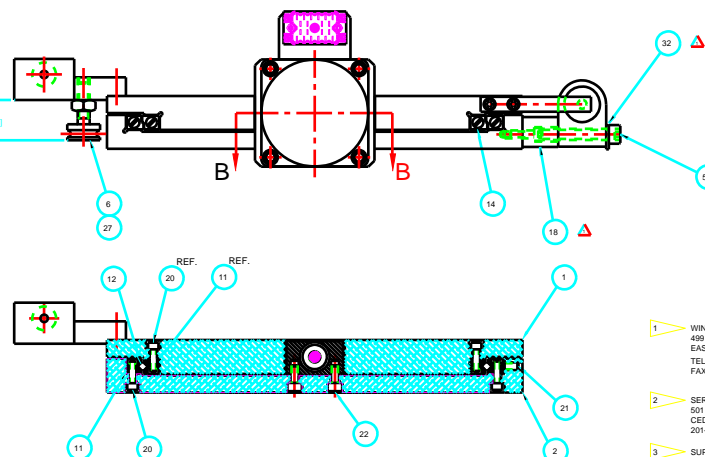
SECTION B-B



5	54	39F1035	GROUND LUG			1
5	53	89F2868	BULKHEAD CONNECTOR			2
	52	COMMERCIAL STD	25-20 X 1.75 SOC. HD. CAPSCREW		SST	2
	51	COMMERCIAL STD	6-32 X 5 SOCKET HEAD CAPSCREW		SST	2
	50	COMMERCIAL STD	8-32 X 5 SOCKET HEAD CAPSCREW		SST	2
	49	COMMERCIAL STD	HELICAL SPRING LOCK WASHER #2 STD		STEEL	4
	48	COMMERCIAL STD	2-56 SQUARE NUT		STEEL	4
	47	COMMERCIAL STD	4-40 HEX NUT		SST	2
	46	COMMERCIAL STD	4-40 X 1.00 ROUND HEAD MACH SCREW		SST	2
	45	COMMERCIAL STD	2-56 X .44 FLAT HEAD MACHINE SCREW		SST	3
	44	COMMERCIAL STD	6-32 X .38 SOCKET HEAD CAPSCREW		SST	2
	43	COMMERCIAL STD	2-56 X .50 FILLISTER HD MACH SCR		SST	4
	42	60-8017-03-13-300-339	CONTACTS			12
	41	90-8016-020-000-601	CONNECTOR BODY			12
	40	P410590505A-310001	T4-31 CONNECTOR BRACKET		SEE DETAIL	1
	39	T2-220004	T2-22 DRIVE SCREW NUT		SEE DETAIL	1
	38		#2-56 X .75 LG. SOC. HD. CAPSCREW		STAINLESS STL.	1
6	37					
	36	HLP 190FS	SENSOR-SPRING LOADED SHAFT		W/2 BODY CLAMPS	1
	35		#2-56 X .5 LG. SOC. HD. CAPSCREW		STAINLESS STL.	2
	34		Ø187 x .63 LG. DOWEL PIN		STAINLESS STL.	2
	33	COMMERCIAL STD	HELICAL SPRING LOCK WASHER #10 STD		STEEL	4
	32	T2-220013	T2-22 MOUNTING BAR		SEE DETAIL	1
	31	T2-220012	T2-22 SENSOR ARM		SEE DETAIL	1
	30		PAN HD SCR. #2-56 X .50 LG.		STAINLESS STL.	4
	29	T2-220007	T2-22 LIMIT SWITCH TRIPPER		SEE DETAIL	1
	28	T2-220006	T2-22 LIMIT SWITCH MOUNTING PLATE		SEE DETAIL	1
	27		NUT, HEX 1/4-20 UNC-2B		STAINLESS STL.	1
	26		#10-24 X .75 LG. SOC. HD. SCREW		STAINLESS STL.	2
	25		NUT, HEX #6-32 UNC-2B		STEEL	2
	24		S.H.C.S. #10-32 UNC-3A x .50 LG		STAINLESS STL.	2
	23		S.H.C.S. #4-40 UNC-3A x .25 LG		STAINLESS STL.	2
	22		S.H.C.S. LOW HD #10-32 UNF-3A X .38		STAINLESS STL.	4
	21		SCR., SOC. SET #8-32UNC-3A X .31		STAINLESS STL.	8
	20		S.H.C.S. M4 x 12mm LG		STAINLESS STL.	32
	19		S.H.C.S. 1/4-20 UNC-3A x .63 LG		STAINLESS STL.	2
	18	T2-220011	T2-22 SENSOR BRACKET		SEE DETAIL	1
5	17	1115M1-T	SWITCH SUBMINUTE BASIC		NEWARK ELECTRONIC	2
2	16	B14-2	BEARING, BALL			1
2	15	SC-11-3-4	COUPLING, BELLOW 3mm x 4mm		'SERVOMETER'	1
4	14	G8A3	ENDPIECE		'SCHNEEBERGER'	8
	13	P410590502-420007	ARM, PUSHING		SEE DETAIL	1
4	12	AC3X38	CAGE, ROLLER		'SCHNEEBERGER'	2
4	11	R 3 200	BEARING, RAIL		'SCHNEEBERGER'	4
3	10	M061-L502	STEPPER MOTOR			1
	9		6-32 X .13 SOC HD SET SCR CUP POINT		SST	4
	8	T2-220005	T2-22 SHAFT EXTENSION		SEE DETAIL	1
	7	P410590502-430006	NUT, BEARING		SEE DETAIL	1
	6	P410590502-420005	POST, SPRING RETAINER		SEE DETAIL	1
	5	T2-220003	T2-22 DRIVE SCREW		SEE DETAIL	1
	4	P410590502-430004	MOUNT, BALL SCREW NUT		SEE DETAIL	1
	3	T2-220002	T2-22 MOUNT, MOTOR		SEE DETAIL	1
	2	T2-220010	T2-22 CARRIAGE, BASE		SEE DETAIL	1
	1	T2-220001	T2-22 CARRIAGE, UPPER		SEE DETAIL	1

SOURCES

- 1 WYNFORD M. BERG, INC.
4909 CEEAN AVE.
EAST ROCKAWAY, NY 11518
TEL: 1-410-959-5010
FAX: 1-516-599-3274
 - 2 SERVOMETER CORPORATION
501 LITTLE FALLS ROAD
CEDAR GROVE, N.J. 07009
201-785-4630
 - 3 SUPERIOR ELECTRIC
LINEAR AND ELECTRONICS DIV.
383 MIDDLE STREET
BRISTOL, CT 06010
TEL: 1-860-586-4500
FAX: 1-860-589-2136
 - 4 SCHEENBERGER INC.
11 DANEGLO DRIVE
BEDFORD, MA 01730
TEL: 617-271-0140
FAX: 617-275-4749
 - 5 NEWARK ELECTRONICS
623 PLAINFIELD RD.
WILLOWBROOK, IL 60521
PHONE (708) 654-8250
FAX (708) 654-8270
 - 6 PENNY & GIES CONTROLS INC.
163 PLEASANT STREET
ATTLEBORO, BOSTON, MA 02703
TEL: (508) 232-2308



SECTION A-A

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